

36. A NOTE ON *LOLIUM DUTHIEI* (HACK. EX HOOK. F.) BARUNA  
BHATTACHARYA  
(With a text-figure)

During a study of the genus *Lolium* Linn. occurring in India I came across 2 sheets bearing the field number 10846 collected by Duthie from Kashmir. They have been identified as *Lolium duthiei* (Hack. ex Hook. f.) Baruna Bhattacharya. J. D. Hooker had validated Hackel's epithet by giving a short description, treating it as a variety of the species *Lolium rigidum* Gaud. But after critical examination of sheets on which the variety was based, it has become clear that it differs from *L. rigidum* proper in a number of characters and therefore deserves a specific status.

The differentiating characters between the two taxa are given below:

Bor (1960, p. 546) has commented on this taxon thus: "The specimen called var. *duthiei* by Hook. f. in THE FLORA OF BRITISH INDIA 7, 364 (1896) is, I think, *L. persicum*". But *L. rigidum* var. *duthiei* is easily separable from *L. persicum* by its smaller size, strict, erect spikes, closely appressed spikelets and fewer number of flowers in a spikelet.

Turrell (1968) in his observation has remarked that *L. rigidum* Gaud. var. *duthiei* Hack. ex Hook. f. has affinities with *L. tenu-*

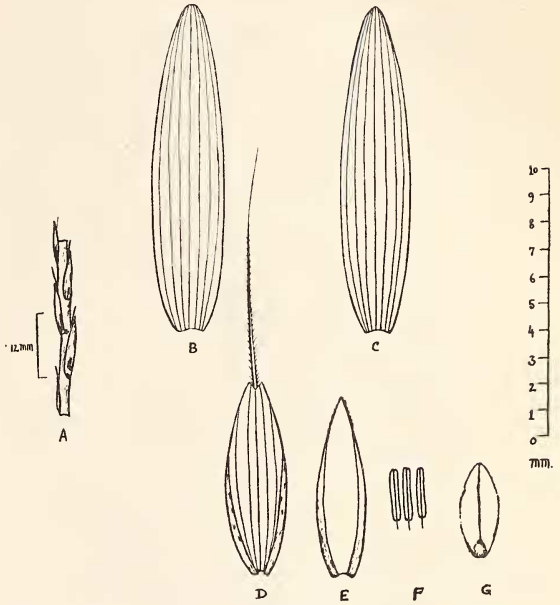


Fig. 1. *Lolium duthiei* (Hack. ex Hook. f.) Baruna Bhattacharya.

*lentum* var. *gracile* Regel. He further suggested that the characters of *L. rigidum* var. *duthiei* are intermediate between *L. rigidum* Gaud.

<i>L. rigidum</i> Gaud.	<i>L. rigidum</i> var. <i>duthiei</i> Hack. ex Hook. f.	
<i>Glumes</i>	Shorter than spikelets, oblong	Equal or longer than spikelets, subulate
<i>Lemmas</i>	Awnless, obovate	Awned, oblong, awns weak, 9 mm long
<i>Anthers</i>	2.5-3.5 mm long	1.5-2 mm long
<i>Caryopsis</i>	± 4 mm long, elliptic to oblong	3-3.5 mm long, oblong
<i>Spikelets</i>	5-10 flowered, awnless, longer than inter-nodes	3-4 (-5)-flowered, awned, shorter or equal to the length of the internodes
<i>Spikes</i>	12-22 cm long, 20-30 spikelets in a spike	6-18 cm long, 13-19 spikelets in a spike
<i>Rachis</i>	Curved, rigid, shallowly hollowed	Straight, slender, terete, strict, deeply hollowed
<i>Ligules</i>	Well developed, 2.2-2.3 mm long	Obsolete, 0.4 mm long

proper and *L. temulentum* var. *gracile* Regel. From the present study it appears to be nearer to *L. rigidum* Gaud. in habit than that of *L. temulentum* var. *gracile* Regel from which it differs in many characters.

The differentiating characters are as follows:

The following nomenclature is proposed:

*Lolium duthiei* (Hack. ex Hook. f.) B. Bhattacharya, STAT et COMB NOV. *L. rigidum* Gaud. var. *duthiei* Hack. ex Hook. f. Fl. Brit. Ind. 7:363. 1896.

*Specimens examined.* Kashmir, Srinagar, Alt. 5-6000 ft, 8-v-1892, J. F. Duthie 10846 (CAL); Kashmir, Srinagar, Alt. 5-6000 ft, 8-v-1892, J. F. Duthie 10846 (DD).

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<i>L. temulentum</i> var. <i>gracile</i> Regel		<i>L. rigidum</i> var. <i>duthiei</i> Hack. ex Hook. f.	
<i>Culms</i>	Compressed, geniculate		Terete, strict, straight
<i>Blades</i>	7.5-16 cm, much larger		4.5-8.7 cm, much shorter
<i>Spikes</i>	Up to 16.5 cm, slender		Up to 13.5 cm, straight, rigid
<i>Rachis</i>	Compressed, not strict		Terete, strict
<i>Spikelets</i>	Longer than the inter-nodes, up to 2 cm long, 7-9 or more flowered, not closely appressed to the rachis		Shorter than the inter-nodes, up to $\pm 1$ cm, 3-4, rarely 5-flowered, closely appressed to the rachis
<i>Glumes</i>	Shorter than or equal to spikelets, 1.5 cm long, linear lanceolate, herbaceous, nerves visible on both surfaces		Longer than spikelets, 1.05-1.25 cm long, subulate, hard, chartaceous, nerves visible only on the dorsal surface

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37. *GALIUM PALUSTRE* L. AND *ELEOCHARIS ACICULARIS* (L.) ROEM ET SCHULT.—TWO NEW PLANT RECORDS FOR INDIA  
(With two text-figures)

While studying the aquatic and wetland vegetation of Kashmir we collected a number of specimens, which on critical scrutiny were identified as *Galium palustre* L. and *Eleocharis acicularis* (L.) Roem & Schult., distri-

buted in Europe, SW. Asia and Africa, but not recorded hitherto from the Indian sub-continent. Both species were collected in paddy fields at various places in Kashmir, indicating that they are well established in the valley